



MPC
Milk Point Controller
Software Managment
Version 1.0 -- 2015
Codice 30000P-1
Codice 30000P-2

SW Ver.	Manual Ver.	Description	Checked
#	1.0	UM Milk Point Controller V6	DP
9.16.27	1.0	MPC Latest revision	DP
	1.0	Detailed all menus and functions of the MPC	GP
	1.0	First edition	MA

Summary

1. General description	3
2. Software installation	3
2.1 Resource requirement	6
2.2 Update	7
2.3 Preliminary action	8
3. View description.....	9
3. View description.....	10
3.1.1 Milk board indication	11
3.1.2 Milk place/Cow status	11
3.2 Software Setup	12
3.2.1 Farm information	12
3.2.2 Communication	13
3.2.3 Milk parlor setup	14
3.2.4 Milking session	15
3.2.5 Feeder system	16
3.2.6 Database	17
3.2.7 Software settings	18
3.2.8Aktivcow Setup	19
3.2.9 Gates Management.....	22
3.3 Feeder.....	23
3.4 Wash.....	24
3.5 Report.....	25
3.6 Curves	26
3.7 Board Setting.....	27
3.8 Cows Manager	28
3.8 Cows Manager	29
3.8 Cows Manager	30
3.8.1 Cow parameters	31
3.8.2 Milking periods	32
3.8.3 Insemination	33
3.8.4 Treatments	34
3.8.5 Feeder	35
3.8.6 Sort gate	36
3.2.7 Sort milk	37

1. General description

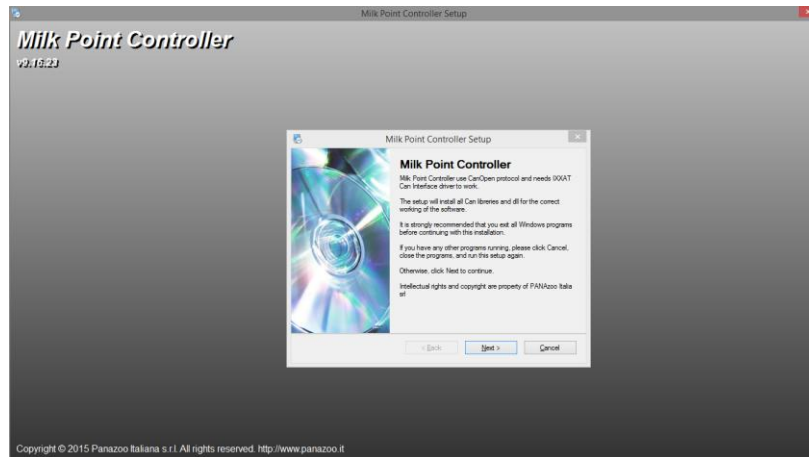
This manual describe functionality of the application Milk Point Controller (MPC abbreviation), and the information for his utilize.

2. Software installation

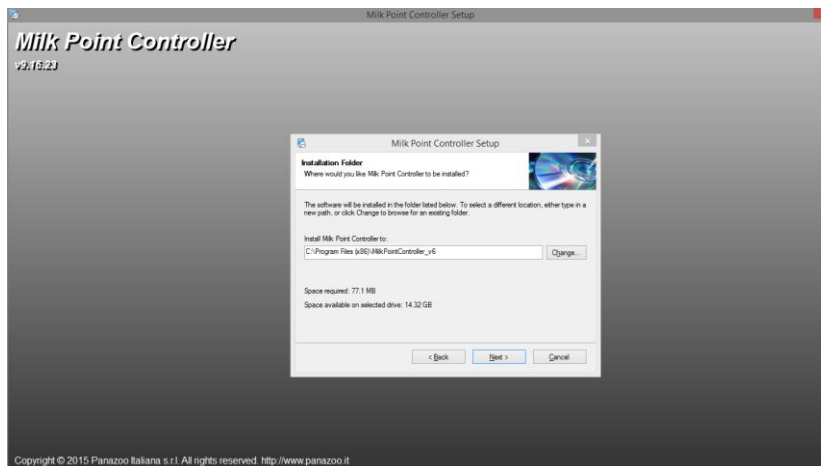
For the installation of the MPC insert the MPC CD in the CD drive and run the setup.exe application, follow the indication of the Setup Wizard.

!

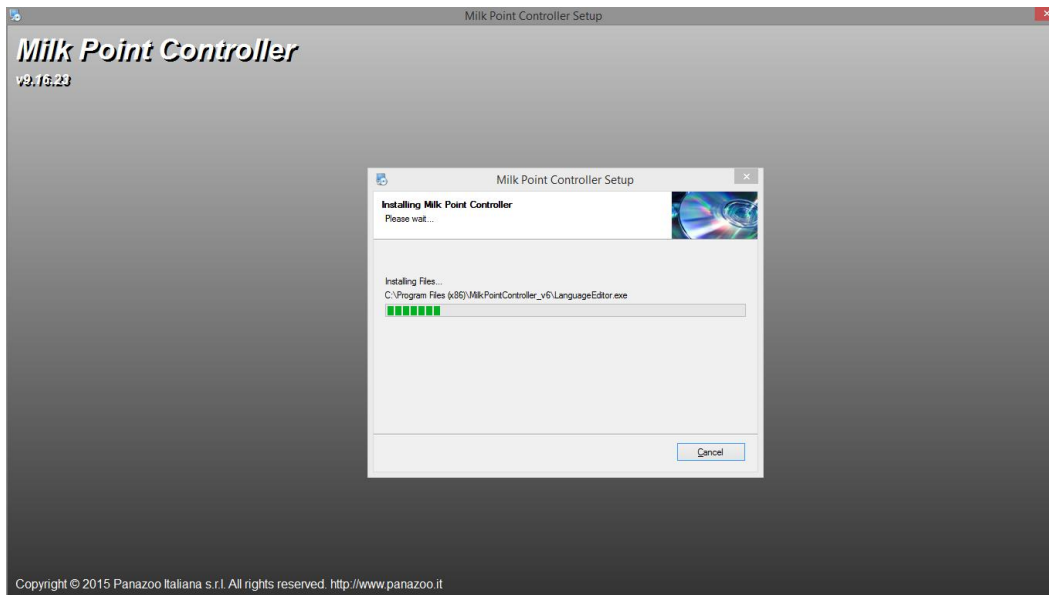
If an old version of the MPC was installed on the PC please **BEFORE** install a new version uninstall old MPC and from Windows Control Panel remove all IXXAT software; reboot PC and run VCclean.exe application (select scan&delete option and select the drive of your PC where the MPC application was installed).



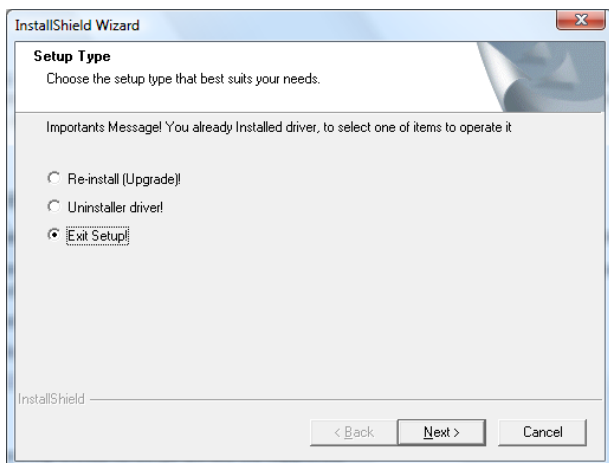
Selection of the MPC installation folder:



Waiting for the complete installation of the software.



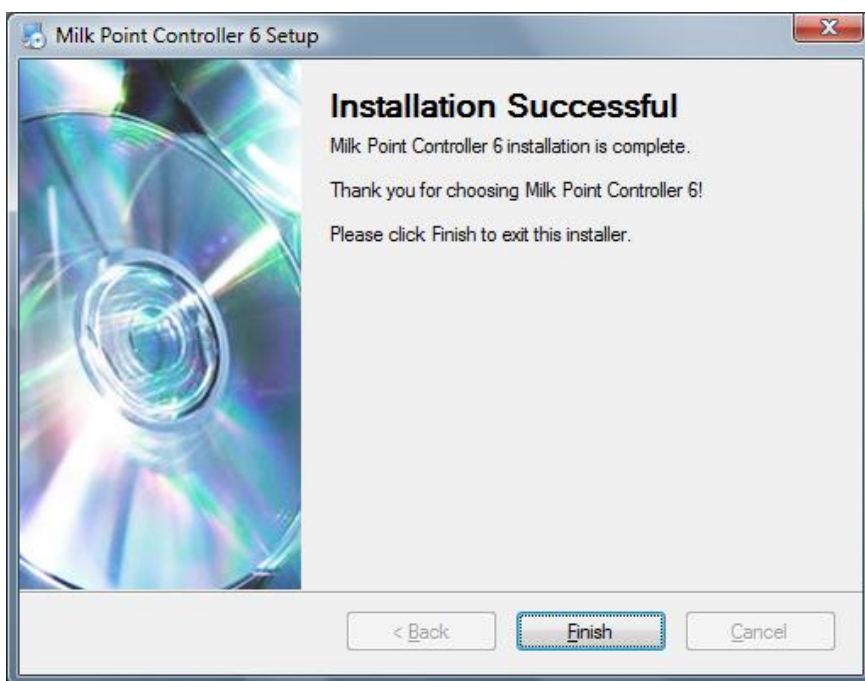
If you using a Wasserbauer Feeder machine connected to MPC. the MPC installation provides all the necessary drivers for the correct communication. If you don't use this feeder system you can bypass this drivers installation and click "Exit setup".



Now MPC must install all the Ixxat Can drivers for the correct communication to the G-ID or other Panazoo Milking station. Click next and



At the end of the Ixxat Can drivers setup, the MPC installation is completed and you must reboot your system. After reboot PC you must connect your Ixxat USB device and let the PC automatically installing the device.



2.1 Resource requirement

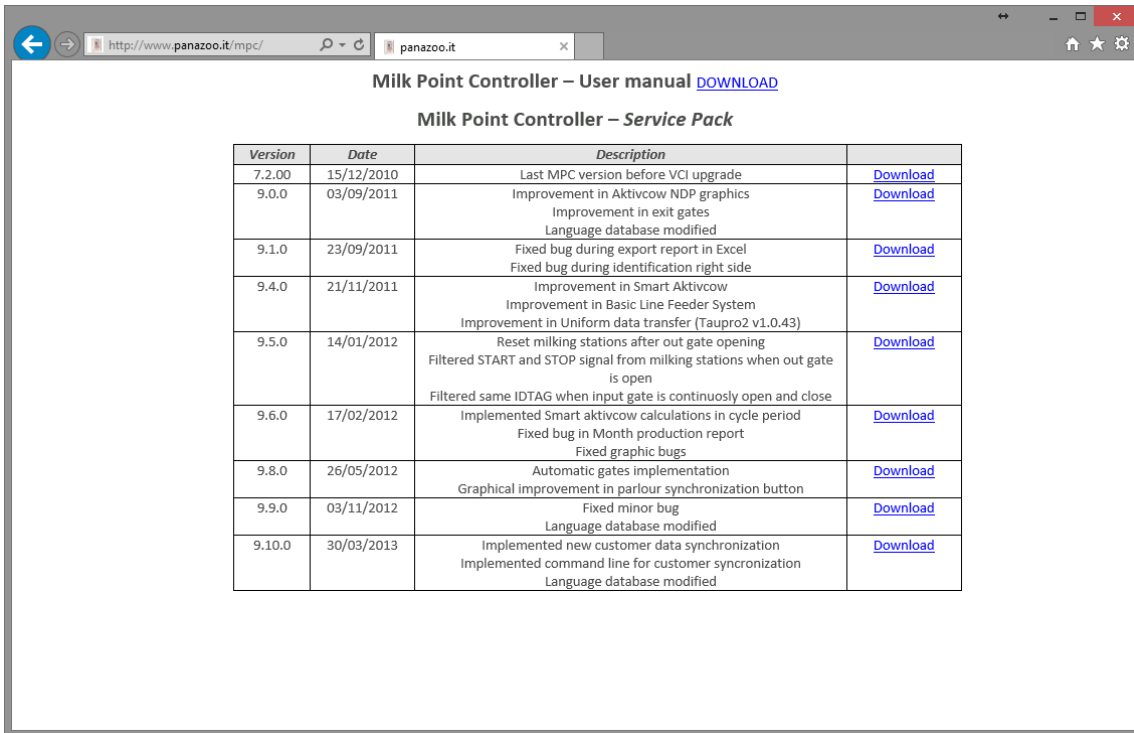
For install and run the MPC application please verify your PC and operating system characteristics:

1. Operating system supported:
 - Windows 2000
 - Windows XP
 - Windows Vista 32/64bit
 - Windows 7 32/64 bit
 - Windows 8 32/64 bit
2. Number 1 USB port available;
3. 2 Gbyte of RAM minimum;
4. CPU Pentium or highest.

2.2 Update

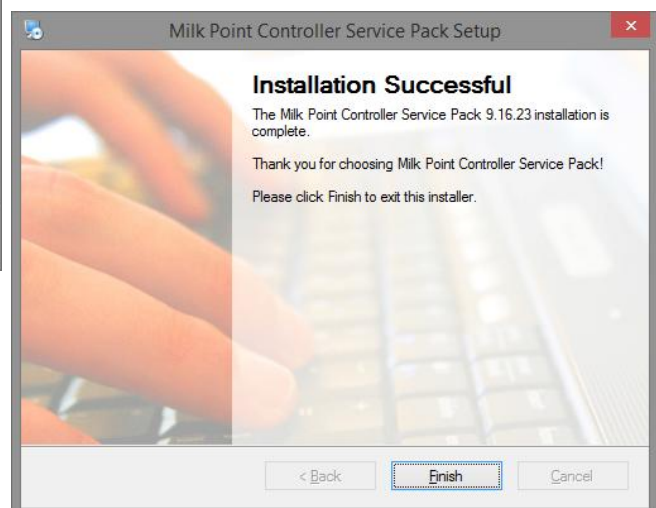
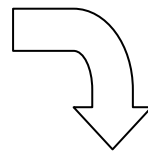
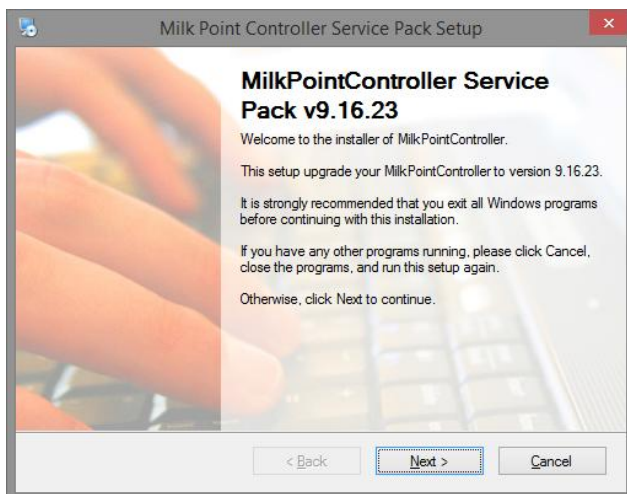
For a better functionality of the Milk Point Controller software, please check on the Panazoo web site (<http://www.panazoo.it/mpc/>) if there are service pack available, if there are download the file and run on your PC.

Panazoo MPC service pack page:

A screenshot of a web browser window showing the 'Milk Point Controller – Service Pack' page. The page has a header with 'Milk Point Controller – User manual' and a 'Download' link. Below this is a table listing various service packs with their versions, dates, descriptions, and download links.

Version	Date	Description	Download
7.2.00	15/12/2010	Last MPC version before VCI upgrade	Download
9.0.0	03/09/2011	Improvement in Aktivcow NDP graphics Improvement in exit gates Language database modified	Download
9.1.0	23/09/2011	Fixed bug during export report in Excel Fixed bug during identification right side	Download
9.4.0	21/11/2011	Improvement in Smart Aktivcow Improvement in Basic Line Feeder System Improvement in Uniform data transfer (Taupro2 v1.0.43)	Download
9.5.0	14/01/2012	Reset milking stations after out gate opening Filtered START and STOP signal from milking stations when out gate is open Filtered same IDTAG when input gate is continuously open and close	Download
9.6.0	17/02/2012	Implemented Smart aktivcow calculations in cycle period Fixed bug in Month production report Fixed graphic bugs	Download
9.8.0	26/05/2012	Automatic gates implementation Graphical improvement in parlour synchronization button	Download
9.9.0	03/11/2012	Fixed minor bug Language database modified	Download
9.10.0	30/03/2013	Implemented new customer data synchronization Implemented command line for customer synchronization Language database modified	Download

If your MPC working version is “older” then the last service pack uploaded in Panazoo Service Pack page, download it and the install. Click next and service pack will be installed on your machine.



2.3 Preliminary action

For the first activation of the system please follow this step:

1. Connect the USB card to the PC;
2. Start “Milk Point Controller” and activate the software with your license key number supplied with Ixxat Can Interface. At the first loading the MPC show you the license activation form. Insert all information and copy the license key in the “Software activation key” field.



The image shows a software activation dialog box titled "Software activation". It contains several input fields for user information: "Farm name", "Address", "Country", "Tel.", "email", and "Software activation key". Each field is represented by a text label followed by a rectangular input box. At the bottom left of the dialog is a graphic of a key inserted into a lock. At the bottom right are two buttons labeled "Cancel" and "OK".

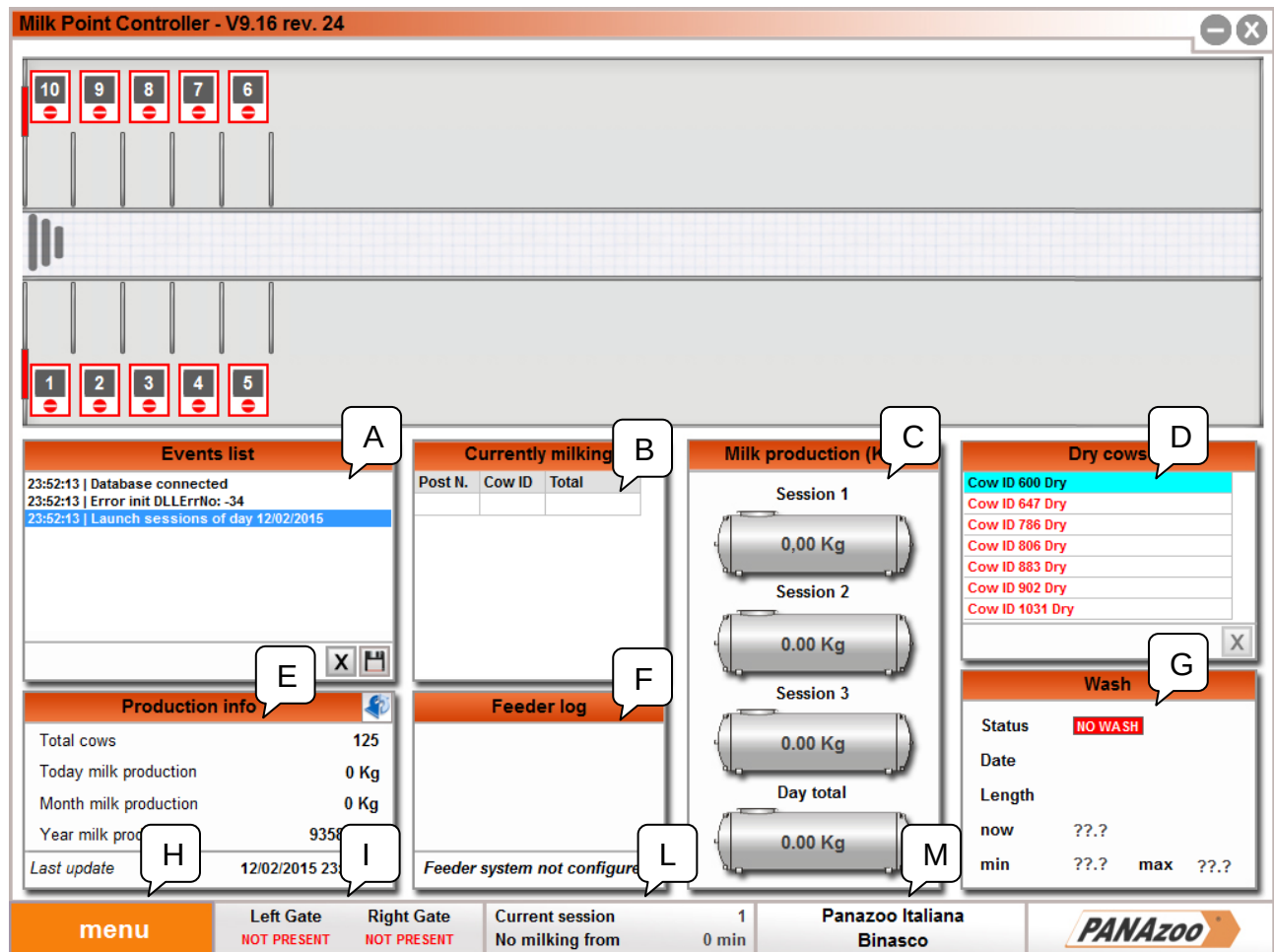
3. Configuring your farm following the configuration information in chapter 3.2;

3. View description

In this section are described all window of the application and the action that user can performed.

Main view

The main window show the status of the parlour, in the top there is a representation of the parlour with the exact number of milk place, the status of the gate and the status of the cow.



A (Event list):

A log of all the MPC and milking station activities.

B (Currently milking):

A list of all the cow in "Milking status" in the farm. Every cow is detailed with "Post Nr.", "CowId" and realtime milking production. With button " " it's possible to switch visualization to "Chart". In this modality is show a bar chart of every cow in milking status.

C (Milk production)

The total of the daily milk production divided by the number of milking sessions set in software setup.

D (Dry cows)

A list of all the dry cows. A cow can be in dry status because of a "manual setting" in dry status in "Cow Manager" form or because are past 220 days after insemination date.

E (Production info)

View a summary of production data daily, monthly, and annually. To optimize the execution processes and workloads of the database, this data is updated only manually by pressing the "refresh"

F (Feeder log)

This pane shows an event log of animals for which the feed is distributed by the automatic system managed by the software.

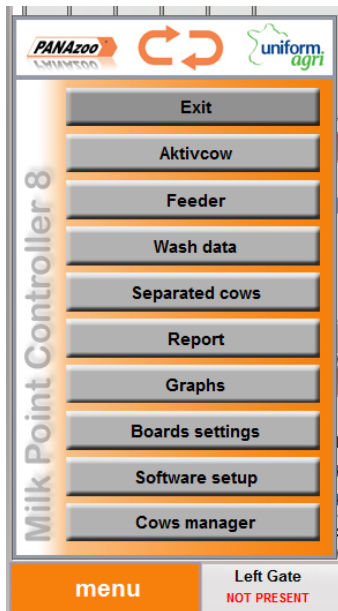
3. View description

G (Wash)

Information about wash session; last wash session date, time, maximum water temperature, minimum water temperature and length of the wash session. Wash data are constantly saved in database and are summarized in table “Wash data” that is linked in main menu.

H (menu)

Main menu button (explained in chapter 3.1.3)



I: gate switch connection info.

For example in a “Double Line” parlour are 2 gate switch: one for the left side and one for the right side. MPC during your loading detects the presence of these switch connected to the Antenna board or G-ID board.

L: Other MPC info.

Current session: the number of the current milking session (1 or 2 or 3, depending on your configuration farm setup)

Farm typology: the farm type setting in software setup (double line, single line, swing over etc).

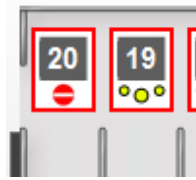
Minutes to new session: from every last “STOP” milking message received by a global-id (or other milking station Panazoo) the software start a “minutes counter”. If no other “START” milking message is received from the PC in 2 hours, the MPC automatically switch to the next milking session. If the previous session was just the last session, the MPC lock any other “START” milking message.

M: farm information detail:

Farm name and farm address

3.1.1 Milk board indication

The milk board could be show in two different way:



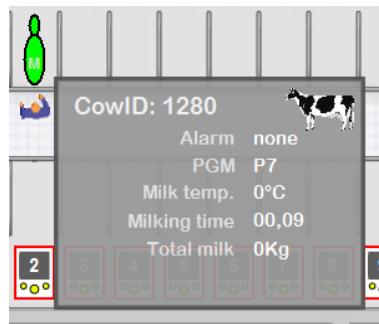
1. Position 19: If the milk place is in line and work on:
2. Position 20: If the milk place is out of line or there is problem on the CAN connection:

3.1.2 Milk place/Cow status

The indication of the status of the place could be show in different way:



a.



b.

1. Position 17: If the milk place are free or a cow not identified are in milking ;
2. Position 18: A cow identified is in milking (green); "M" indicates that cow is "manually" entered (not automatically identified)
3. Position 19: A cow was in stop milking status (grey);
4. Position 20: Milk place is in wash.
5. If put the mouse pointer over a cow in milk are show the milking information like in picture b, it is possible to see alarm presence, milking program, milk temperature, milking time and the milk yeld of the cow;

3.2 Software Setup

The Software setup menu permit to customize the MPC for the parlor, before to start to work the user must configure the application.

Attention at the first run of the MPC application some warning messages are showed, are not important, they are showed because the system was not configured.

!

Now are describe all the step needed to follow before start with the milk activities.

!

This information are important for specialized person that install the Panazoo milking system.

3.2.1 Farm information

This form need to insert the information of the owner of the parlour.

The screenshot shows a 'Software setup' window with a sidebar on the left containing the following menu items: **Farm information**, **Communication**, **Milking parlour setup**, **Milking session**, **Feeder system**, **Database**, **Software settings**, **Aktivcow setup**, and **Gates managment**. The main area displays the 'Farm information' tab with the following fields: **Farm name** (Panazoo Italiana), **Address** (Via Copernico 2), **Country** (Binasco), **Tel.** (209333), and **email** (111). At the bottom, there is a warning icon and the text 'Do not apply setup modifications during milking', along with 'Parlour sincronization' and 'OK' buttons.

Field	Value
Farm name	Panazoo Italiana
Address	Via Copernico 2
Country	Binasco
Tel.	209333
email	111

3.2.2 Communication

This form need to select the type of communication board are connected to the PC and if the identification system is with walk true gate or with one antenna for milking place (available for the goat system)

The screenshot shows a 'Software setup' window with a sidebar on the left containing the following menu items: Farm information, Communication (highlighted), Milking parlour setup, Milking session, Feeder system, Database, Software settings, Aktivcow setup, and Gates managment. The main area is titled 'Can interface selection' and contains two radio button options: 'USBtoCAN Compact' and 'USBtoCAN II', with 'USBtoCAN II' being selected. To the right of these options are images of the respective hardware devices. Below this, the 'Antenna type selection' section has three radio button options: 'Individual', 'Walk through' (selected), and 'Single place'. At the bottom left, there is a warning icon and the text 'Do not apply setup modifications during milking'. At the bottom right, there are two buttons: 'Parlour synchronization' and 'OK'.

All the CAN communication interfaces are provided by Ixxat (www.ixxat.com) . Drivers are fully supplied and installed by Milk Point Controller in the application setup.

With UsbToCan Compact it's possible to connect up to 32 can nodes so 30 milking station and 2 antenna boards.

With UsbToCan II it's possible to connect up to 127 can nodes for each of the two "Can Line".

It is possible to select three different types for antennas depending on the type of installation:

- Individual: individual identification system for goats, applicable to systems in the milking parlour or carousels - install an antenna for each milking stall;
- Walk-through: identification made at the entrance gates of the milking parlour, applicable for milking parlours and carousels;
- Single place: individual identification for cattle, applicable for systems in the milking parlour.

3.2.3 Milk parlor setup

This form need to set the type of parlor present, the number to insert in the cow standing is the number of the milking place and not the number of the milking board (this two number are different only for swing over systems); from here it is also possible select the sort gate system is presence.

The screenshot shows a software setup window titled "Software setup" with a red close button in the top right corner. On the left is a vertical sidebar with buttons for "Farm information", "Communication", "Milking parlour setup" (which is highlighted), "Milking session", "Feeder system", "Database", "Software settings", "Aktivcow setup", and "Gates managment". The main area is titled "Parlour type" and contains the following elements:

- Cow standings:** A numeric input field showing "10" and a dropdown arrow.
- Parlour type options:** Four radio buttons: "Double line" (selected), "Single line", "Rotary", and "Swingover". Each option has a corresponding diagram: "Double line" shows two parallel rows of milking stalls; "Single line" shows one row; "Rotary" shows a semi-circular arrangement of stalls with a central arrow; "Swingover" shows a row of stalls with a central opening.
- Sort gate:** Two radio buttons: "not present" (selected) and "present".

At the bottom of the window, there is a warning icon and the text "Do not apply setup modifications during milking". To the right of this are two buttons: "Parlour synchronization" and "OK".

The key "Parlour Synchronisation" allows the alignment of the milking parlour configuration according to the configurations set in the software for the Feeder section and the of milking stations Shift section during automatic identification via RFID tags.

3.2.4 Milking session

This form need to set the number of the milking session for the farm and the typical time of the star sessions.

! The “Parlour synchronization” push button must be pressed AFTER the first reboot of the application and after the activation code insertion.

The screenshot shows a 'Software setup' window with a sidebar on the left containing the following menu items: Farm information, Communication, Milking parlour setup, **Milking session**, Feeder system, Database, Software settings, Aktivcow setup, and Gates managment. The main area is titled 'Milking session' and contains the following settings:

- Quantity:** A numeric input field set to 3, with minus and plus buttons on either side.
- Sessions timetable:** A table with three rows:

Session	Time
Session 1	06 : 00
Session 2	12 : 00
Session 3	19 : 00
- Extratime last session:** A numeric input field set to 0, followed by the text 'minutes'.
- End session wait:** A numeric input field set to 1, followed by the text 'minutes'.
- Warning:** A red triangle icon followed by the text 'Milking session valid from 00.00 to 23.59'.

At the bottom of the window, there is a status bar with a red triangle icon and the text 'Do not apply setup modifications during milking'. To the right of this are two buttons: 'Parlour sincronization' and 'OK'.

Quantity:number of milking sessions, 2 or 3.

Sessions timetable:time period of the sessions.

End session wait:when all the milking station are in IDLE status (no milking) a minutes counter start. If no other milking is registred in the minutes setting, the MPC automatically switch to the next session. If the current session is the last no other milking will be stored in database.

3.2.5 Feeder system

This form need to setup the type of the feeder system if it is present.

It is possible to select:

1. **In-Parlour feed** If no external feed system are present and the only feeder system is the Feed in parlour (with Global ID Feed device);
2. **Out-parlour feed** The Basic Feed if the are in the farm some feed station, for this modality it is possible the interval for dispence the feed the time for start the feeding.

It is also possible to activate the feed in parlour systems with the auto dispenser synchronised with the closing of the milking gate

Software setup

Farm information

Communication

Milking parlour setup

Milking session

Feeder system

Database

Software settings

Aktivcow setup

Gates managment

☒ **In-parlour feed**

Automatic feed distribution **Portion unit (gr)**

☐ ON ☒ OFF

Feed delay **Appetitiser**

1 ☐ portion 0

☐ **Out-parlour feed (UsbToCan II only)**

Feeder start time **Syncro feed**

6

Feeder distribution interval

☐ 1 hour step ☒ 5 hours step

Missed feed ration **Maximum distributable portion**

100 % 2000 g

Do not apply setup modifications during milking **Parlour sincronization** **OK**

3.2.6 Database

This form need to select the file of the database of the milking data, if it is the first activation set the file C:\ProgramData\Panazoo\MilkPointController_V6\MilkDB.mdb that is the default.

Software setup

Farm information

Communication

Milking parlour setup

Milking session

Feeder system

Database

Software settings

Aktivcow setup

Gates managment

Currently database path

C:\Users\Gerardo\Desktop\MilkDb.mdb

Select working database

Create a database backup

Milking deleting from database

Cows deleting from database

Reset cows feeder database

Belarus synchronization

Automatic database backup

Disabled

Do not apply setup modifications during milking

Parlour sincronization OK

! The other control needed for managing the database, but attention that old data could be lost, so utilize only if you know what to do.

! It's recommended to create "periodically" backup of the working database in order to keep "light" the database for the storing of the milking.

When you create a backup of the database it's recommended to "Clear" the milking (button Milking deleting) In the current database, so you can restart with a clean milking database that maintaining all the stored cows.

Automatic database backup

The MPC software can automatically create a backup copy of the database at the end of daily milking sessions.

3.2.7 Software settings

This form need to check directly if any update are available, for set the language and the measure unit that

Software setup

Farm information

Communication

Milking parlour setup

Milking session

Feeder system

Database

Software settings

Aktivcow setup

Gates managment

Software information

Milk Point Controller V.9.16.24 [Check upgrade](#)

Software activation key 531B1C6C1364077B

Language UNITED KINGDOM

Animal type ☒ cow ☐ goat ☐ sheep

Engineering units ☒ °C ☐ °F ☒ Kg ☐ lb

Master ID 21

Webcam setup (only for rotary parlour)

☐ Disabled [device](#) [format](#)

Shift system ☒ Enable/Disable Shift ☐ Automatic software reboot ☐ Disabled

Do not apply setup modifications during milking [Parlour synchronization](#) [OK](#)

Language

Select an available language for the MPC. If MPC is not available for your language or if you want to apply some modifies to your language, click the button . This will run a tool “Language Editor” from which you can modify or create a new MPC language.

Engineering units

Setting of the measurements units used in the software and in the reports.

Webcam configuration

If you want to use a webcam to monitoring farm status, after you have installed all the necessary drivers to the correct working of the webcam, select it for using in the MPC. After a reboot of the software you can enabling the visualization of the webcam from the main menu (button “Webcam”).

Shift system

It is possible also set the webcam presence, and enabling the Shift functionality.

! PAY ATTENTION !

This setting MUST BE THE SAME OF THE MILKING BOARD.

Automatic software reboot

At the end of daily milking sessions, setting this option will auto reboot software in order to reset and realign any errors or communication codes between the software and the milking records.

3.2.8 Aktivcow Setup

Software setup

Farm information

Communication

Milking parlour setup

Milking session

Feeder system

Database

Software settings

Aktivcow setup

Gates management

☒ Smart aktivcow

☐ Ndp / Smart

☐ Ndp / Aktiv

☐ HTC

Perc. prod. decrease %

Perc. temp. alarm %

Perc. milking length %

Milking days < >

Show daily summary at sessions ending ☐

Send lock to milking station ☐

Do not apply setup modifications during milking

Parlour synchronization OK

From here you can set the 4 modes of Aktivcow system operation:

1. Smart aktivcow

- *App. Prod. Decrease:*
Percentage value of the decline in average milk production beyond which the alarm will signal the animal in heat
- *App. Temp. alarm:*
Percentage value of change in average milk temperatures beyond which the alarm will signal the animal in heat
- *App. Milking length:*
Percentage value of change in average milking time beyond which the alarm will signal the animal in heat
- *Milking days*
Range of days after the start date of lactation within which the alarm will signal the animal in heat. By default, this value is 21 with a range of plus or minus 2 days, so for example with early lactation on 01/02/2015, the alarm control will start on 19/02/2015 and end on 23/02/2015.
- *Show daily summary at session ending:*
View a summary screen of the alarms at the end of milking sessions.
- *Send lock to milking station*
When an alarm for an animal sounds, the MPC can send a message to LOCK the milking stall and so alert the operator before the START of milking.

2. Ndp / Smart

In this configuration, identification is by means of antennas and the Nedap, but the control and calculation of aktivcow runs on the same software systems as the previous point, and configuration parameters remain the same.

3. Ndp / Aktiv

The screenshot shows a 'Software setup' window with a sidebar on the left containing the following menu items: Farm information, Communication, Milking parlour setup, Milking session, Feeder system, Database, Software settings, Aktivcow setup, and Gates managment. The 'Ndp / Aktiv' option is selected in the main area, indicated by a radio button and a dotted box. Other radio button options are Smart aktivcow, Ndp / Smart, and HTC. Below the radio buttons, there are six settings with spinners: 'Number of succeeding periods increased' (value 3), 'Minimum level of an increased period' (value 2), 'Average factor of increased periods' (value 3), 'Calendar match' (value 18), 'Days no attention after calving' (value 30), and 'Days no attention after insemination' (value 30). At the bottom, there is a warning icon and text: 'Do not apply setup modifications during milking'. To the right of the warning are two buttons: 'Parlour synchronization' and 'OK'.

1. **Number of succeeding periods increased:** Only one increased period is not enough for an attention, there has to be a number of succeeding periods which are increased.
2. **Minimum level of an increased period:** In order to call a period as increased, the factor X has to be equal to or higher then this level.
3. **Average factor of increased periods:** The average of the factors X of the increased periods has to equal or exceed this value.
4. **Calendar match:** To determine whether a specific period has a calendar match, calculate the time between this period and the insemination date or heat date of the cow. The period has a calendar match if this time is between 18 and 24 days (≥ 18 and ≤ 24) or between 39 and 45 days (≥ 39 and ≤ 45).
5. **Days no attention after calving:** Within these days after calving no attention is given, even if an attention for high activity is calculated.
6. **Days no attention after insemination:** Within these days after insemination no attention is given, even if an attention for high activity is calculated.

4. HTC

The screenshot shows a 'Software setup' window with a sidebar on the left containing the following menu items: Farm information, Communication, Milking parlour setup, Milking session, Feeder system, Database, Software settings, Aktivcow setup, and Gates managment. The main area on the right is titled 'Smart aktivcow' and contains four radio buttons: 'Smart aktivcow', 'Ndp / Smart', 'Ndp / Aktiv', and 'HTC'. The 'HTC' option is selected. Below the radio buttons are several settings with up/down arrows and input fields: 'Short average' (value 3), 'Long average' (value 75), 'Factor (sensitivity)' (value 28), 'Minimum length of activity' (value 3), 'Period average' (value 5), 'Ideal delay after heat detection' (value 18), and 'Send lock to milking station' (checkbox). At the bottom of the window, there is a warning icon and text: 'Do not apply setup modifications during milking', and two buttons: 'Parlour synchronization' and 'OK'.

The calculation of the HTC follows precise specifications and algorithm calculation based on the measurement of the number of steps of the animal divided by 15 periods daily.

Each period lasts for 96 minutes, a calculation of total minutes of the day divided by 15.

- Short average:

Number of periods for calculation of the average short period

- Long average:

Number of periods for calculation of the average long period

- Factor (sensitivity)

Sensitivity factor value.

- Minimum length of activity

Number of alarms which must occur to determine if the animal has actually been HTC state or not.

- Period average

Number of periods to be considered for the calculation of HTC

- Ideal delay after heat detection

Number of hours after which the system issues a visual report through the software and possibly also to the HTC alarm detection card.

- Send lock to milking station

Possibility to send an alarm signal to the milking stations so that the operator is alerted before the milking START.

3.2.9 Gates Management

In this section it's possible to set the options for the input and output gates.

Software setup

Farm information

Communication

Milking parlour setup

Milking session

Feeder system

Database

Software settings

Aktivcow setup

Gates management

Out gates presence ☒

Gates for milking station Reset ☒ Input gates ☐ Output gates

Gates handle enabling ☒

Input gate ☒ Not retentive ☐ Retentive

Out gate ☒ Not retentive ☐ Retentive

AUX gate ☒ Not retentive ☐ Retentive

Do not apply setup modifications during milking

Parlour synchronization OK

Out gates presence

"Gates for milking station Reset", da qui è possibile decider se utilizzare le porte di ingresso o di uscita come "reset" di mungitura per le schede.

Enabling gates

This feature must be enabled if you want to control the movement of the entry, exit and rotation gates directly from milking keyboards cards in the parlour.

For each gate you can select the operating modes:

- **Not Retentive:** The gate moves or remains in the active position as long as the operator keeps the milking tab button pressed. When released, the gate stops or returns to an inactive position. This mode is typically used in systems where for safety reasons a quick exit mechanism rotates as long as the button is pressed, for the security of staff and animals;
- **Retentive:** In this case, each time the button on the milking stations is pressed, the gate changes state (position). This mode is typically used for entry and exit gates where there is the need for the gates to remain open or closed until a new command.

3.3 Feeder

This function show all feed dispensed divided for cow, in the bottom it is possible select one cow or all cow.

Vista SUMMARY:

Feeder database							Summary	
Cow ID	Cow name	Feed / M 1	Feed / M 2	Feed / M 3	Feed / M 4	Tot Eated (%)		
33	NL 373 439 818	2,00 / 2,50				80%		
48	DE 034 959 812 0	2,50 / 2,50				100%		
70	DE 035 102 341 3	3,50 / 2,50				140%		
71	DE 035 092 217 1	4,00 / 2,50				160%		
75	DE 035 110 766 6	1,50 / 2,50				60%		
76	DE 035 110 765 3	2,00 / 2,50				80%		
79	DE 035141 079 2	1,70 / 2,50				68%		
82	DE 035 189 194 5	4,50 / 2,50				180%		
83	DE 035 211 200 4	4,50 / 2,50				180%		
183	DE 053 461 783 5	3,40 / 2,50				136%		
188	DE 035 082 198 7	2,00 / 2,50				80%		
190	DE 035 120 804 9	0,00 / 2,50				0%		
194	DE 035 051 085 3	0,00 / 2,50				0%		
523	PT 813 794 343	0,00 / 2,50				0%		
524	PT 413 822 055	2,40 / 2,50				96%		
526	PT 013 822 052	0,00 / 2,50				0%		
541	PT 413 842 294	3,50 / 2,50				140%		
549	PT 713 872 346	3,00 / 2,50				120%		
560	PT 313 889 636	1,00 / 2,50				40%		
563	PT 613 889 682	1,00 / 2,50				40%		
564	PT 813 889 988	5,00 / 2,50				200%		
566	PT 013 889 987	0,70 / 2,50				28%		
574	PT 913 922 613	0,00 / 2,50				0%		
578	PT 013 922 981	0,30 / 2,50				12%		
579	PT 513 922 974	3,00 / 2,50				120%		
584	PT 514 038 308	0,00 / 2,50				0%		
589	PT 114 066 841	0,00 / 2,50				0%		
601	PT 114 732 135	0,00 / 2,50				0%		
603	PT 514 732 138	0,00 / 2,50				0%		
606	PT 414 752 547	2,50 / 2,50				100%		

Cow ID

All

▼

Date

28/10/2014

▼

X

Feeder log

Summary

Print

SUMMARY From the screen (viewable only by setting ALL in the Cow Id to search), the total food consumed divided by type can be evaluated based on the day set, in addition to the number of animals that have or have not eaten.

Vista FEEDER LOG

Feeder database					Summary	
Period Nr.	Food 1	Food 2	Food 3	Food 4		
1	0gr / 2500gr					
2	0gr / 2500gr					
3	0gr / 2500gr					
4	0gr / 2500gr					
5	0gr / 2500gr					
6	0gr / 2500gr					
7	0gr / 2500gr					
8	0gr / 2500gr					
9	0gr / 2500gr					
10	0gr / 2500gr					
11	0gr / 2500gr					
12	0gr / 2500gr					
13	0gr / 2500gr					
14	0gr / 2500gr					
15	0gr / 2500gr					
16	0gr / 2500gr					
17	0gr / 2500gr					
18	0gr / 2500gr					
19	0gr / 2500gr					
20	0gr / 2500gr					
21	0gr / 2500gr					
22	0gr / 2500gr					
23	0gr / 2500gr					
24	0gr / 2500gr					
	0gr / 6000gr					

Cow ID

48

▼

Date

28/02/2015

▼

X

Feeder log

Summary

Print

The Feeder Log screen displays a period-to-period log showing how much feed was consumed for the day and for the animal selected.

3.4 Wash

This function permit to show and save the data in the selected period range.

Wash data

Date	Session number	min	max	Length	Circulation
24/08/2009 16.22.47	1	17°C	17°C	00m 15s	
24/08/2009 16.27.47	1	17°C	17°C	00m 28s	
24/08/2009 16.28.46	1	17°C	17°C	00m 05s	
24/08/2009 16.34.07	1	17°C	17°C	00m 23s	
24/08/2009 16.57.59	1	16,5°C	17°C	07m 49s	
24/08/2009 17.05.48	1	16,5°C	16,5°C	00m 19s	
24/08/2009 17.16.56	1	16,5°C	16,5°C	00m 07s	
10/09/2009 11.45.33	1	16°C	16°C	00m 20s	
10/09/2009 11.46.36	1	15,5°C	16°C	00m 18s	
10/09/2009 12.12.06	1	15,5°C	16°C	00m 10s	
10/09/2009 12.15.09	1	17°C	17°C	00m 24s	
10/09/2009 12.41.13	1	16,5°C	17°C	00m 38s	
10/09/2009 14.14.50	1	17,5°C	18°C	00m 18s	
11/09/2009 6.46.46	1	12°C	12°C	00m 20s	
11/09/2009 8.31.04	1	13,5°C	17°C	07m 01s	
11/09/2009 8.57.31	1	13,5°C	66°C	16m 59s	> 40°C - 16m 11s
11/09/2009 9.31.38	1	16,5°C	20,5°C	07m 02s	
11/09/2009 11.27.50	1	15°C	15°C	00m 14s	
11/09/2009 12.53.14	1	16°C	16°C	00m 30s	
11/09/2009 13.01.50	1	16°C	16°C	03m 12s	
11/09/2009 13.03.22	1	16°C	16°C	00m 27s	
11/09/2009 17.57.19	1	19°C	19°C	00m 14s	
11/09/2009 17.59.10	1	17,5°C	19°C	01m 07s	
11/09/2009 19.50.11	1	15,5°C	24,5°C	07m 04s	
12/09/2009 6.52.43	1	12,5°C	13,5°C	01m 15s	
12/09/2009 7.00.05	1	12,5°C	13°C	00m 23s	
12/09/2009 8.32.02	1	14,5°C	24°C	07m 03s	
12/09/2009 8.55.58	1	14,5°C	66,5°C	17m 00s	> 40°C - 14m 51s
12/09/2009 9.36.22	1	16,5°C	19°C	07m 03s	
12/09/2009 17.36.34	1	17,5°C	19°C	00m 55s	
12/09/2009 19.09.53	1	15,5°C	26,5°C	05m 43s	
12/09/2009 19.12.52	1	15,5°C	16°C	02m 47s	
13/09/2009 7.10.49	1	12,5°C	12,5°C	00m 18s	
13/09/2009 8.57.34	1	14,5°C	23°C	07m 01s	
13/09/2009 9.24.01	1	14°C	66°C	17m 00s	> 40°C - 16m 05s
13/09/2009 9.58.58	1	16,5°C	21°C	07m 02s	
13/09/2009 17.31.10	1	18,5°C	19°C	02m 10s	

Table

Generate PDF

Select from08/07/2009

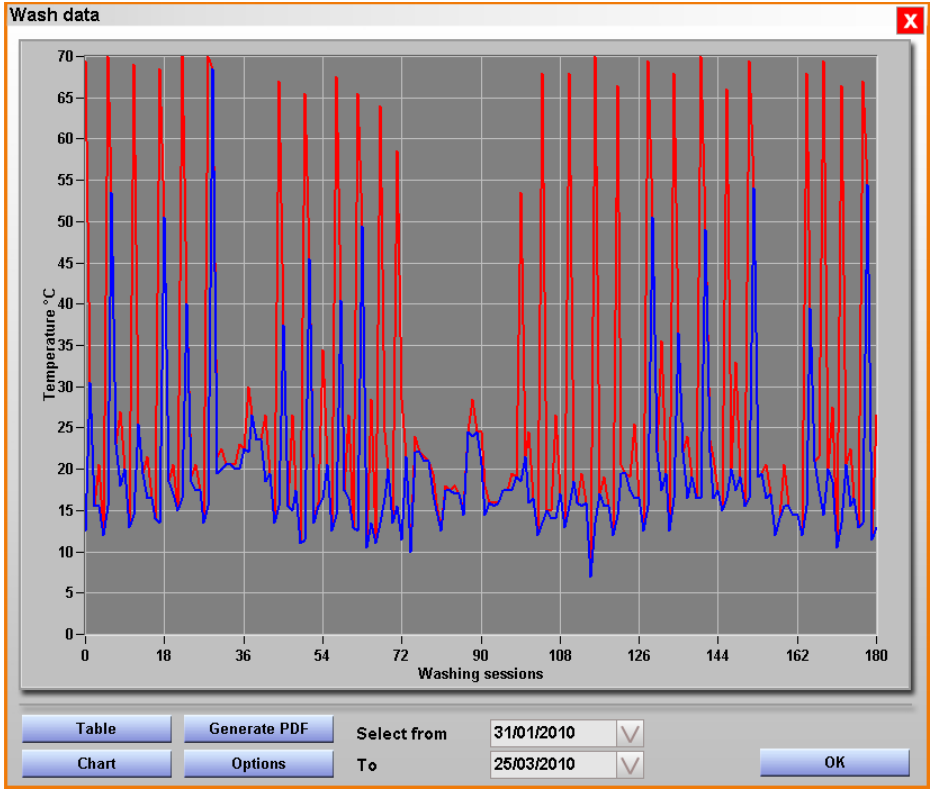
Chart

Options

To14/01/2010

OK

Chart



3.5 Report

This function permit to elaborate, produce, print and export the report of the production, there are some filters to select.

REPORT AND PRODUCTION ANALYSIS

Report selection
Milk production by CowID

CowID
☒ 353
☒ 354
☒ 355
☒ 356
☒ 357
☒ 1124
☒ 1279
+ X

Analysis period
Select from
06/08/2009
To
15/10/2009

Chart options
Y axis min 0
Y axis max 1000
Autoscale ☒

Results table

CowID	IDTAG	Group	Date	Time	S1 [Kg]	S2 [Kg]	S3 [Kg]	Milk total	Milk temp.	Length
9	139714974	1	01/10/2009	18.39.04	14,06	0	0	14,06	35	5m 50s
9	139714974	1	02/10/2009	7.51.31	17,89	0	0	17,89	35,5	5m 52s
9	139714974	1	02/10/2009	18.52.21	0	13,6	0	13,6	36,5	5m 13s
9	139714974	1	03/10/2009	8.01.18	17,14	0	0	17,14	35,5	5m 50s
9	139714974	1	03/10/2009	18.27.09	0	14,43	0	14,43	34,5	5m 45s
9	139714974	1	04/10/2009	18.20.45	0	15,2	0	15,2	36	5m 57s
9	139714974	1	05/10/2009	7.42.45	18,36	0	0	18,36	36	6m 36s
9	139714974	1	06/10/2009	7.27.02	18,24	0	0	18,24	35,5	6m 20s
9	139714974	1	06/10/2009	18.40.33	0	14,06	0	14,06	36	5m 17s
9	139714974	1	07/10/2009	7.27.07	17,96	0	0	17,96	34,5	6m 55s
9	139714974	1	07/10/2009	18.33.28	0	13,96	0	13,96	36	5m 48s
9	139714974	1	08/10/2009	8.02.11	17,75	0	0	17,75	35,5	6m 13s
9	139714974	1	08/10/2009	18.57.58	0	13,8	0	13,8	35,5	5m 42s
9	139714974	1	09/10/2009	8.15.16	18,98	0	0	18,98	36,5	6m 31s
9	139714974	1	09/10/2009	18.32.41	0	14,05	0	14,05	35,5	5m 22s
9	139714974	1	10/10/2009	8.25.53	19,44	0	0	19,44	36,5	6m 12s
9	139714974	1	10/10/2009	18.10.44	0	13,17	0	13,17	36	4m 59s
9	139714974	1	11/10/2009	7.40.22	16,85	0	0	16,85	36	5m 38s
9	139714974	1	11/10/2009	18.20.34	0	13,88	0	13,88	35,5	4m 46s
9	139714974	1	12/10/2009	7.48.29	17,54	0	0	17,54	36	5m 52s
9	139714974	1	12/10/2009	19.27.25	0	15,79	0	15,79	36	6m 28s
9	139714974	1	13/10/2009	8.08.25	17,33	0	0	17,33	35,5	6m 16s
9	139714974	1	13/10/2009	18.47.42	0	15,51	0	15,51	36	5m 43s

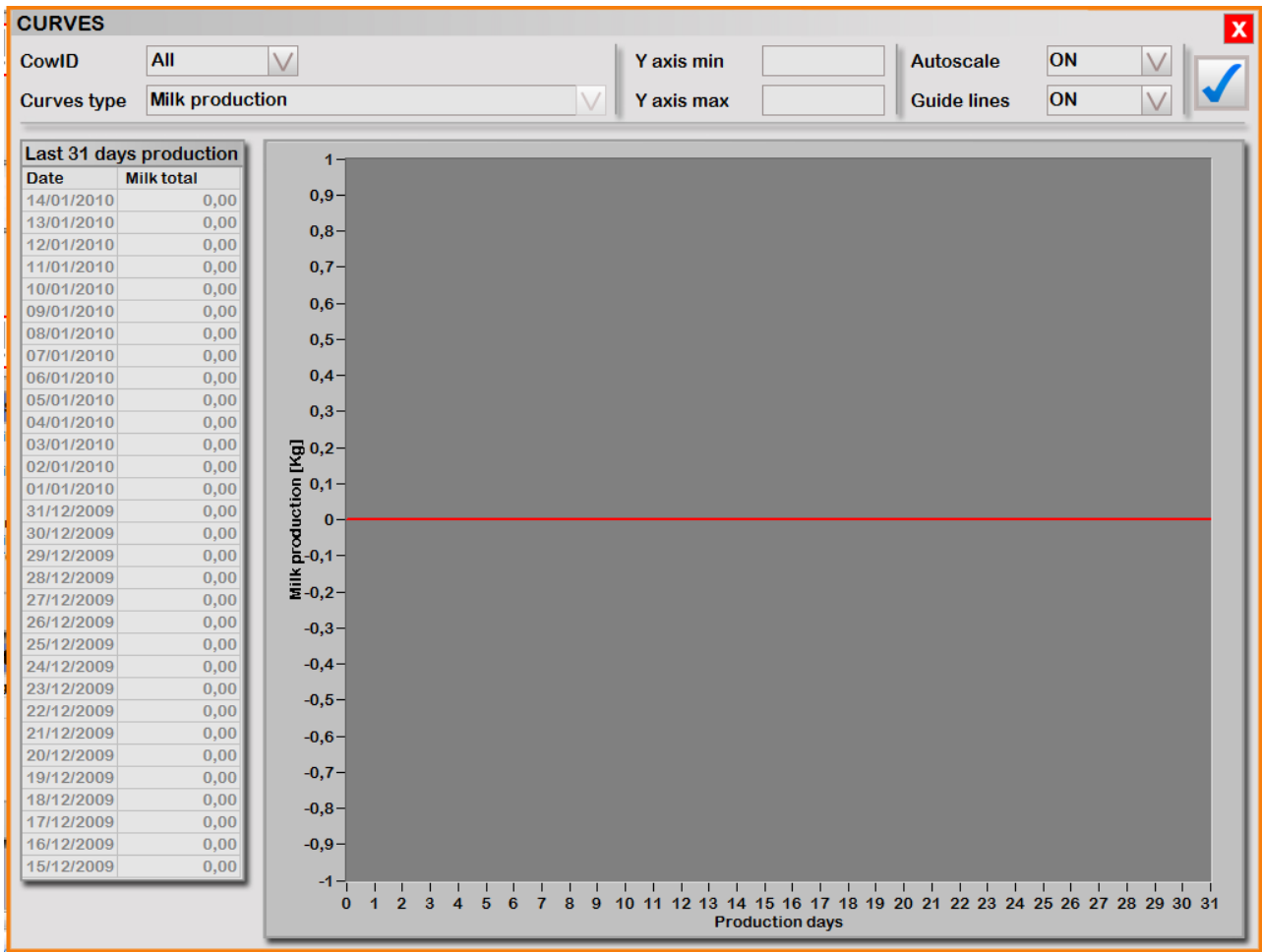
Export ExcelPDF download milkChartGenerate PDFFile A.I.ATable

Description of the available reports.

Milk Production by CowId: a report that summarizes all the “milking” of the cows selected in the Cow Id list box in the selected date range. Result table shows result sorted by Cow Id -> Date -> Time.

3.6 Curves

This function permit to show the curves of production, temperature, ISC and milking time for the last 31 days of activity.



With “Y axis min” and “Y axis max” controls it’s possible to set the Y axis range values for the visualization. Auto scale button automatically set this values.

3.7 Board Setting

This function is accessible from the menù and with double click on the milking boards symbols, with this panel is possible to modify some parameters of the milking boards from the remote station.

BOARDS SETTINGS✕

Board node

Board description

Parameter group

1

GlobalID Panazoo

General Settings GLID

✓

Parameter list

Step	Val.	Descr.
CONTRAST	5	Set contrast value of LCD display 0-10
LANGUAGE	0	English = 0 Italian = 1 Francaise = 2
PWM_TYPE	0	Power Supply type AC or DC 0=DC 1=AC
PROGRAM_LOCK	0	Lock the milking programm in the print
MEASURE_UNIT	0	European = 0 U.S. Type = 1
ENABLE_ISC	1	Enable the conductivity control
EDGE_ISC	25	Level Conductivity from 0 to 60 - 30=300.000 scc
DELAY_ISC	3	Delay ISC control 3=300 gr.
MCMD	0	Enable Master Wash Function
MCID	20	Master Wash Source ID



OK



Clicking this button you save the parameter on the board node (milking station) selected



Clicking this button it's possible to save the parameter to "all" the milking stations connected to the CAN network

3.8 Cows Manager

COWS MANAGER

Cow ID IDTAG

Cows list

Cow ID	ISO IDTAG	Group	Set0	ISC	Milking lock	PGM1	PGM2	PGM3	Cow name	Feed per milking
0	0	0	26	30		P1				
648	0	2	23	30		P7	P5	P9	SIMENTAL-0648	
1304	0	1	23	30		P7	P5	P9	SIMENTAL-ABASI	
1643	0	1	23	30		P7	P5	P9	HOLSTEIN-VICDAN	
2310	0	1	23	30		P7	P5	P9	SIMENTAL-ÇİGDEM	
2655	0	2	23	30		P7	P5	P9	SIMENTAL-GÜLSÜM	
2657	0	2	23	30		P7	P5	P9	SIMENTAL-DILARA	
2920	0	2	23	30		P7	P5	P9	SIMENTAL-BONCUK	
2921	0	2	23	30		P7	P5	P9	SIMENTAL-YAZGULLU	
2922	0	2	23	30		P7	P5	P9	SIMENTAL-NURDAN	
2923	0	2	23	30		P7	P5	P9	HOLSTEIN-BENEKLI	
4036	0	1	23	30		P7	P5	P9	HOLSTEIN-4036	
4099	0	2	23	30		P7	P5	P9	HOLSTEIN-GUZGULLU	
4412	0	1	23	30		P7	P5	P9	SIMENTAL-SUKRAN	
4653	0	1	23	30		P7	P5	P9	HOLSTEIN-SUZI	
5137	0	1	23	30		P7	P5	P9	SIMENTAL-PERVIN	
6244	0	1	23	30		P7	P5	P9	SIMENTAL-CEYLAN	
7731	0	1	23	30		P7	P5	P9	HOLSTEIN-GIZEM	
8436	0	1	23	30		P7	P5	P9	MONTOFON-KASTOI	
8726	0	1	23	30		P7	P5	P9	HOLSTEIN-ZARIFE	
9046	0	1	23	30		P7	P5	P9	HOLSTEIN-ÇİBİCAN	

Total cows: 21

Icons: Add, Edit, Delete, Back, Forward, Print

In cow manager you can handle all your animals database. Add, modify, remove cows, add inseminations, treatments feeder data etc.

Double-click on a cow in the list for modify the configuration of a cow.

3.8 Cows Manager

In the top of the window there is a “search bar” from which is possible to search a specific animal in the database. The search can be by “Cow Id” or by “Id Tag”.

In the left fo the window there is a “summary cow info” from which it’s possible to view the “Total lactation period” (total milking amount in the current lactation), “Milk temp.average”, “Milking length average” and “Milking flow” calculated by “Total Milk / Milking Length”.

In the bottom left there is an indication of the total cows stored in the MPC database.

In the bottom right there there are buttons functions:



Multiple cows configuration saving

Pressing this button MPC shows a window like this:

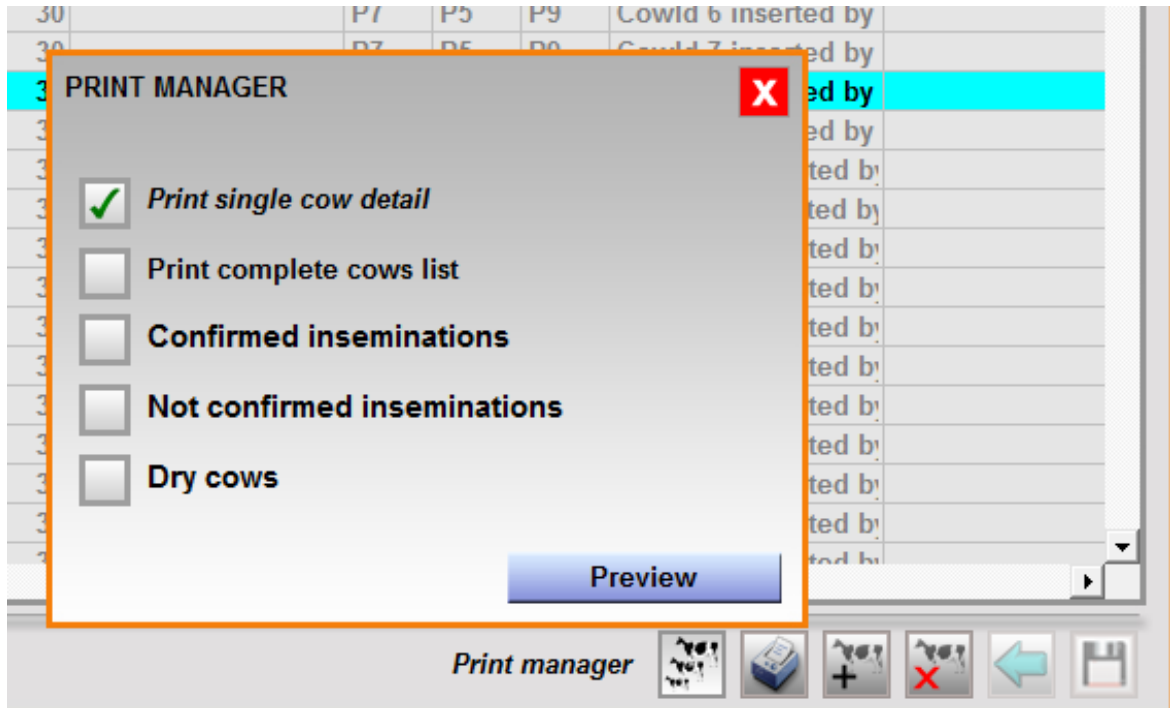
Here it’s possible to set some configuration automatically to “all” the cows stored in the database.

This “common” configuration are: Set0, ISC and Feeder (only for swing over parlor)

3.8 Cows Manager



Pressing this button a window let you choose to print one of this report:



- “Print single cow list” print a PDF report of the single cow selected in cow list. This report contain all the settings and information about the selected cow.
- “Print complete cow list” print a PDF report containing the list of all the cows stored in database
- “Confirmed inseminations” print a PDF containing a list of the confirmed cows insemination.
- “Not confirmed inseminations” print a PDF containing a list of the NOT confirmed cows inseminations.
- “Dry cows” print a PDF containing a list of the actually dry cows.

3.8.1 Cow parameters

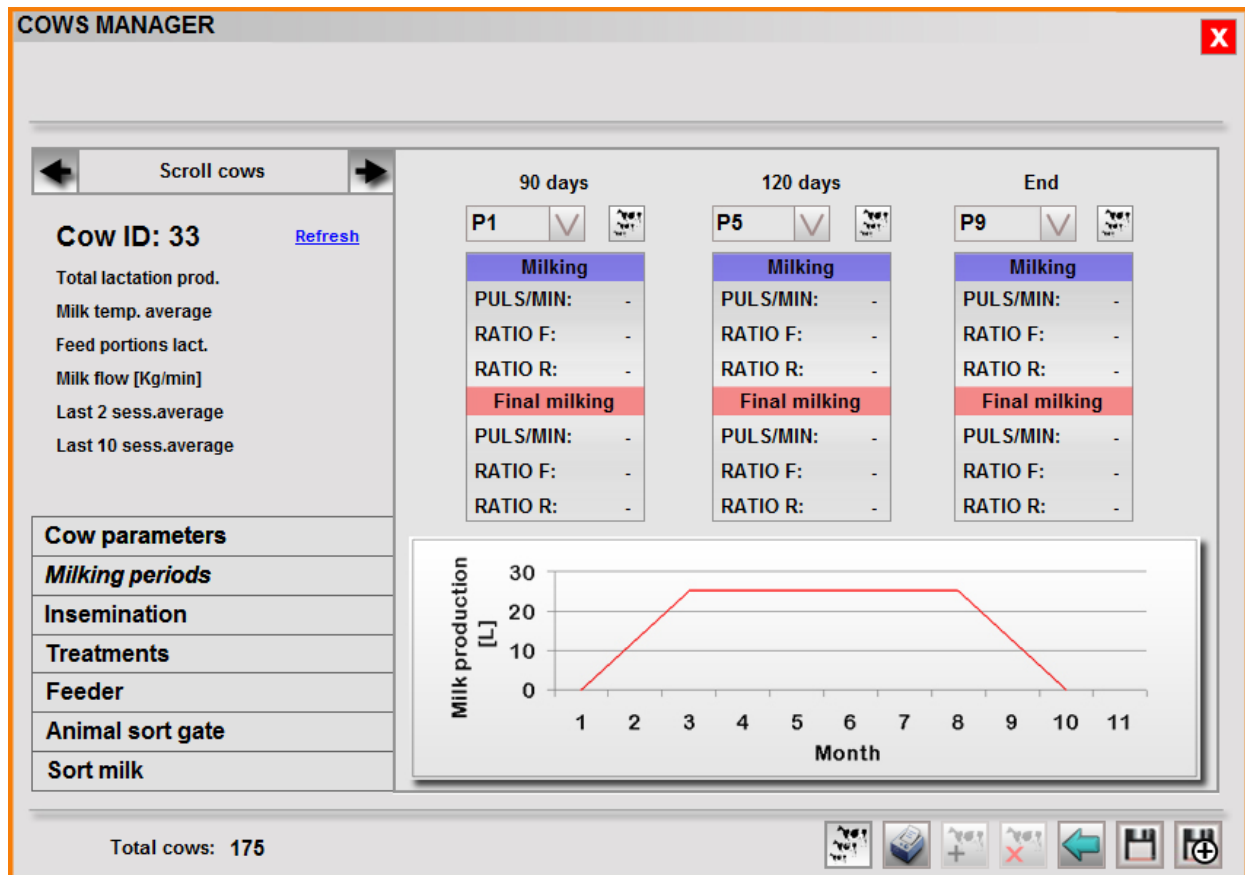


Clicking this button you can add a cow in the database with the user interface.

For each cow in database it's possible to set custom milking parameters, cow data info, feeder and many other parameters. Field with symbol "*" are obligatory for the correct storing of the cow.

- CowId: automatically calculated by adding "1" to the last cowid detected in database. Otherwise you can always change this.
- Birth date: the birth date of the cow
- Cow name: the name of the cow
- Status: milking (standard status for the cow with no lock)
dry (cow in dry status)
dry with lock (cow in dry status but during the identification the MPC send to the milking station a "LOCK" that will be visualized on the display of the milking station)
- Set0: value of parameter Set0
- ISC: value of parameter ISC
- Group: number of the cow lot
- ISO IDTAG: the idtag number associated to the cow
- Milking lock: it's possible to set a lock for a cow. In this case when the cow will be identified by the antenna, the MPC send a "COW LOCK" message to the milking station and this information is showed on the display of the milking station. If you "activate" lock this can be forever ("always in lock") or with expiry date ("lock until")
- Lactation Nr: the number of the current lactation. Lactation number is automatically increased at every calving.
- Start: first milking date of the current lactation. This date can be manually set or automatically by MPC at the first milking of the cow.
- Feed per milking: feed "portion". This feed is handled directly by the milking station.
- Milking days: an indicator of the current lactation days milking
- Keep Open: only if the Nedap activity it is enabled, the cow with this flag set are checked for activity warning

3.8.2 Milking periods



From here it's possible to set 3 custom milking program for the cow.

The 3 program are automatically applied by the MPC with this method:

First milking date → 90 days → 120 days → till the end
PGM1 *PGM2* *PGM3*



 Clicking this button it's possible to apply the milking program to all the cows stored in database.

3.8.3 Insemination

COWS MANAGER

Scroll cows

Cow ID: 33 [Refresh](#)

Total lactation prod.
Milk temp. average
Feed portions lact.
Milk flow [Kg/min]
Last 2 sess.average
Last 10 sess.average

Cow parameters
Milking periods
Insemination
Treatments
Feeder
Animal sort gate
Sort milk

	Execute	Estimated calvi	Birth	Bull name	Confirmed
1	23/02/2007			judd	NO
2	06/04/2007			f3	NO
3	28/04/2007	02/02/2008	27/01/2008	judd	SI
4	29/03/2008	03/01/2009	01/01/2009	EVERET 1	SI
5	25/02/2009	02/12/2009	30/11/2009	DEANN 1	SI
6	16/02/2010	23/11/2010	16/11/2010	TOYSTORY 1	SI
7	02/02/2011			BOUTLAND 1	NO
8	17/03/2011			CORY 2	NO
9	20/05/2011	24/02/2012	21/02/2012	CORY 3	SI
10	06/04/2012	11/01/2013	05/01/2013	TOYSTORY 1	SI
11	05/03/2013	10/12/2013	12/12/2013	SUPER 1	SI
12	18/04/2014			MINK 1	NO
13	10/07/2014			BALTAR 2	NO
14	30/09/2014			JACEY 3	NO
15	01/11/2014			T, CASA 4	NO
16	22/11/2014			T, CASA 5	NO

Add new **Edit** **Delete**

Total cows: 175

From here it's possible to handle the cow inseminations.

Clicking "Add new" MPC show you this form where you can store the insemination data.

Execute: date of the insemination

Days after ins.: days past after insemination date

Bull name: name of the bull

Forecast birth: date of the forecast birth. This date is calculated adding "280" days to the "Execute" Insemination date.

Calf born: date of the calf birth.

Confirmed: status of the insemination

COWS MANAGER

Scroll cows

Cow ID: 33 [Refresh](#)

Total lactation prod.
Milk temp. average
Feed portions lact.
Milk flow [Kg/min]
Last 2 sess.average
Last 10 sess.average

Cow parameters
Milking periods
Insemination
Treatments
Feeder
Animal sort gate
Sort milk

Insemination info

Execute

Days after ins.

Bull name

Estimated calving

Actual calving date

Confirmed ☐ YES ☒ NO

Back **Save**

Total cows: 175

3.8.4 Treatments

From here it's possible to handle the treatments of the cow.

The screenshot shows the 'COWS MANAGER' application window. On the left is a sidebar with a 'Scroll cows' button and a list of cow statistics for 'Cow ID: 33'. Below this is a menu with options: Cow parameters, Milking periods, Insemination, **Treatments**, Feeder, Animal sort gate, and Sort milk. The main area features a table with columns: Date, Treatment, Veterinary name, and Notes. At the bottom of the table are 'Add new', 'Edit', and 'Delete' buttons. A status bar at the bottom left shows 'Total cows: 175'. A toolbar at the bottom right contains various icons. An arrow points from the 'Add new' button to the next screenshot.

Date: date of the treatment

Treatment: description of the treatment

Veterinary name: the name of the veterinary

Notes: notes to be included in the treatment (optional)

This screenshot shows the 'Treatment info' form within the 'COWS MANAGER' application. The sidebar is identical to the previous screenshot, with 'Treatments' selected. The main area contains a form with the following fields: 'Date' (a date picker set to 05/12/2014), 'Treatment' (a text box containing 'Treatment test'), 'Veterinary name' (a text box containing 'Tom'), and 'Notes' (a text box). A cow illustration is on the right side of the form. At the bottom are 'Back' and 'Save' buttons. The status bar shows 'Total cows: 175'.

3.8.5 Feeder

Milk Point Controller provides two types of feeder system:

- Basic line: totally handled by MPC and Panazoo milking stations.
- Custom line: handled by Wasserbauer feeding machine and coordinated by MPC software.

The feeder typology can be selected in “software setup”.

Basic line

The screenshot shows the 'COWS MANAGER' software interface. On the left, a sidebar lists cow parameters for 'Cow ID: 33', including lactation production, milk temperature, feed portions, milk flow, and session averages. A central panel for 'Feed / M 1' allows setting a feed name (currently 'geral'), a portion (2500g), and a percentage (34%). It includes buttons for 'Delete feed', 'Set same percentage', 'Set for all the cows', and 'Use these % for all cows'. The PANAZOO feeder system logo is visible. On the right, a table displays the 24-hour feeding schedule with four periods: 06.00-11.00 (0%), 11.00-16.00 (34%), 16.00-21.00 (33%), and 21.00-02.00 (33%). The bottom status bar shows 'Total cows: 175' and a toolbar with various icons.

Hour	Percent (%)	Grammes
06.00 - 11.00	0	0
11.00 - 16.00	34	850
16.00 - 21.00	33	825
21.00 - 02.00	33	825

Basic line feeder consist of 4 aliment daily distributed in different periods; this means that a cow is enabled to eat only 1 time in a period a day. This periods can be subdivided in this way:

- Once every 5 hours
- Once every 1 hour

In both case the “feeder system” work for a total of 20 hours. In the remaining 4 hours the “feeder system” is switched off.

Start hour and period selection can be set in “software setup”.

For each food it's possible to set “Food name” and “Food portion”. Food portion is automatic distributed in the day according to the “Percent %” set value. The default setting of the percent value is 25% for 5 hours period and 5% for 1 hour period distribution.

Anyway the percent values of every distribution period can be manually modify but the necessary condition is that the total amount of the percent values must be 100%.

The “Grammes” display is automatic updated at every change of the food portion according to the setting of the percent value.

3.8.6 Sort gate

The screenshot shows the 'COWS MANAGER' application window. On the left, a sidebar lists various cow parameters and management tabs. The 'Animal sort gate' tab is selected. The main area displays settings for a specific cow, Cow ID 33. A checkbox 'Enable/Disable sort gate' is checked. Below it, four radio button options are available: 'Always separate' (selected), 'Separate until' (with a date input field), 'Separate one time', and 'Separate by alarms'. Under 'Separate by alarms', three checkboxes are listed: 'Separate by milk temperature alarm', 'Separate by Smart aktiv', and 'Separate by H.M.C alarm'. At the bottom, a 'Separate cow in:' section has two radio button options: 'Box1' (selected) and 'Box2'. The status bar at the bottom indicates 'Total cows: 175' and contains several navigation icons.

COWS MANAGER

Scroll cows

Cow ID: 33 [Refresh](#)

Total lactation prod.
Milk temp. average
Feed portions lact.
Milk flow [Kg/min]
Last 2 sess.average
Last 10 sess.average

Cow parameters
Milking periods
Insemination
Treatments
Feeder
Animal sort gate
Sort milk

☒ Enable/Disable sort gate

☒ Always separate

☐ Separate until V

☐ Separate one time

☐ Separate by alarms

☐ Separate by milk temperature alarm

☐ Separate by Smart aktiv

☐ Separate by H.M.C alarm

Separate cow in:

☒ Box1

☐ Box2

Total cows: 175

Sort gate it's a "physical" gate installed in the farm from which it's possible to "separate" specific cows. This separation can be "enabled/disabled" in this tab that is the last setting of the cow manager.

There are 3 methods to separate a cow.

- Always separated – the cow will be always separated with no conditions.
- Separate until – the cow will be separated until the setting date.
- Separate one time – the cow will be separated just one time, after that this setting will be resetted.
- Separate by alarms:
 - Separate by milk temperature alarm – during a milking session if the milking station detect a temperature alarm this cow will be separated
 - Separate by smart aktiv – when the software calculation of the Smart Aktiv produces an alarm the cow will be separated.
 - Separate by HMC alarm: during a milking session if the milking station detect a "conductivity alarm" this cow will be separated

A cow can be separated in 2 different destination "box".

3.2.7 Sort milk

It is possible to separate the milk produced by a certain animal based on 3 criteria:

- 1) Separate always, the milk product will always separated
- 2) Separate up to..., the milk will be separated until the day set
- 3) Separate once, the milk will be separated only once after which the milk separation for that animal will be disabled

COWS MANAGER✕

← Scroll cows →

Cow ID: 71 [Refresh](#)

Total lactation prod.
Milk temp. average
Feed portions lact.
Milk flow [Kg/min]
Last 2 sess.average
Last 10 sess.average

Cow parameters

Milking periods

Insemination

Treatments

Feeder

Animal sort gate

Sort milk

☒ Enable/Disable sort milk

☐ Always separate

☒ Separate until

29/03/2015 ▼

☐ Separate one time

Total cows: 175



Warranties



Panazoo Italia S.r.l. will replace at no charge for 1 year period from the date of purchase, any part which results defective in terms of material or workmanship, after checking the part on our premises in Binasco (MI) – Italy the buyer will bear all transport costs for shipping the defective materials for substitution within the terms of this warranty.

The removal of the identification label on the electronic card will invalidate the warranty conditions.

PANAZOO Italia Srl
Via N. Copernico 2/4
20082 Binasco (Mi)
Tel. +39-02-9054833
Fax. +39-02-90091860
e-mail : info@panazoo.it
web: www.panazoo.it